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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,441	06/02/2005	Michihiro Ota	19291-002US1	1868

26211 7590 05/31/2007
FISH & RICHARDSON P.C.
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EXAMINER	
OBEID, MAMON A	
ART UNIT	PAPER NUMBER
3609	
MAIL DATE	DELIVERY MODE
05/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,441	OTA, MICHIHIRO	
	Examiner	Art Unit	
	Mamon Obeid	3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/02/2005,08/25/2005,02/01/2007,03/14/2007.

DETAILED ACTION

Status of claims

1. This action is in reply to application No 10/537,441 filed on 02 June 2005.

2. Claim 1-18 are currently pending and have been examined.

Priority

3. *Applicant's claim for the benefit of a Japanese application No 2002-350040, filed on 02 December 2002 is acknowledged.*

Information Disclosure Statement

4. The Information Disclosure Statement filed on 06/02/2005, 08/25/2005, 02/01/2007 and 03/14/2007 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 2, 3,4, 9, 10 and 11 are rejected under U.S.C 102 (e) as being unpatentable over Park et al, U.S Application Publication No. US 2002/0194137 A1.

8. **Examiner's Note**: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

9. **As per claim 1:**

- *storing card issuing information including card authentication information and card information issued by a card issuer in a mobile communication terminal;*(see at least paragraph [0201] and Fig. 32.)

- *transmitting the card issuing information from the mobile communication terminal to a sales processing device when executing sales processing using the card issuing information;* (see at least paragraph [0201] and Fig. 32.)

- *determining a validity of the card information by the sales processing device based on the card authentication information included in the card issuing information received from the mobile communication terminal;* (see at least paragraph [0201] and Fig. 32.)

- executing predetermined sales processing by the sales processing device when the card information is determined to be valid. (see at least paragraph [0201] and Fig. 32.)

10. **As per claim 2:**

- *wherein the sales processing device is an automatic vending machine, and the automatic vending machine permits the sales transaction using the card issuing information when the card information is determined to be valid based on the card authentication information included in the card issuing information received from the mobile communication terminal,* (see at least paragraph [0223] and Fig. 45.).

- *stores and accumulates sales price information related to the sales transaction together with the card information when the sales transaction is executed.* (see at least paragraph [0222] and Fig. 43.).

11. **As per claim 3:**

- *wherein the card authentication information is generated by using a password managed in confidence between the card issuer and the sales processing*

device or at least a part of the card information. (see at least paragraph [0271] and Fig. 66.)

12. **As per claim 4:** wherein the card issuing information includes: *first information obtained by encrypting the card information with a first key; and second information obtained by encrypting with a second key the card information encrypted with the first key, and the mobile communication terminal stores information including the first information and the second information as the card issuing information.* (see at least paragraph [0188] and Figures 22 and 24.)

13. **As per claim 9:**

- *a card information issuing server that issues card issuing information including card authentication information and card information;* (see at least paragraph [0130])

- *a mobile communication terminal that receives the card issuing information issued by the card information issuing server through wireless communication and stores the received card issuing information;* (see at least paragraph [0130].)

- *a sales processing device that performs predetermined sales processing based on the card issuing information received from the mobile communication terminal through communication with the mobile communication terminal; and* (see at least paragraph [0196] and Fig. 29.)

- *a settlement server that collects sales information related to a sales transaction performed using the card issuing information from the sales processing device and settles the sales information,* (see at least paragraph

[0224].)

- *wherein the mobile communication terminal transmits the card issuing information from the mobile communication terminal to the sales processing device when sales processing is performed with the use of the card issuing information, and* (see at least paragraph [0196] and Fig. 29.)

- *the sales processing device determines the validity of the card information based on the card authentication information included in the card issuing information received from the mobile communication terminal, and performs predetermined sales processing when the card information is determined to be valid.*(see at least paragraph [0196] and Fig. 29.)

14. **As per claim 10:** *wherein the sales processing device is an automatic vending machine, andthe automatic vending machine permits a sales transaction using the card issuing information when the card information is determined to be valid based on the card authentication information included in the card issuing information received from the mobile communication terminal, and stores and accumulates sales price information related the sales transaction together with the card information when the sales transaction has been performed.* (see at least paragraph [0223].)

15. **As per claim 11:**

- *wherein the card authentication information is generated by using a password managed in confidence between the card information issuing server and the sales processing device or at least a part of the card information.* (see at least paragraph [0271] and Fig. 66.)

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 5, 6, 7, 8 and 12-18, are rejected under U.S.C 103 (a) as being unpatentable over Park et al, U.S Application Publication No. US 2002/0194137 A1 in view of Meiji, Japanese Publication No. 2002-023625.

18. **As per claim 5:** *wherein the card issuing information includes information obtained by encrypting synthesized information of the first information and the second information with a third key, and the mobile communication terminal stores the information obtained by encrypting synthesized information of the first information and the second information with the third key as the card issuing information.* (Park teaches repeated card information encryption and storing such information in a portable terminal, (see at paragraphs [0184 and [0188]]), but failed to teach synthesizing encrypted information, however Meiji teaches synthesizing first and second encrypted rows to form a synthesized encryption sentence (See at least the abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the repeated card information encryption taught by Park with the method of synthesizing encrypted information taught by Meiji, since this would maintain the secrecy of the data (see at least Meiji's abstract).)

As per claim 6: *wherein the sales processing device separates the first information and the second information from the card issuing information received from the mobile communication terminal; determines the validity of the card issuing information by encrypting the first information with the second key, and comparing the encrypted first information with the second information; and stores and accumulates sales price information related to the sales transaction together with the first information when a sales transaction has been performed using the card issuing information.*(Park teaches an automatic vending machine, repeated card information encryption, validating credit information and storing sales records (see at least paragraph [0223]), but failed to teach the separation process of a first and second information. However, Meiji teaches a method of separating two encrypted first and second rows to form encryption sentences (see at least Meiji's abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the above limitations taught by Park with the method of separating encrypted information taught by Meiji, as an extra step of authentication to protect private information (see at least Meiji's abstract).)

19. **As per claim 7:** *wherein the sales processing device decrypts the card issuing information received from the mobile communication terminal with the third key before separating the card issuing information into the first information and the second information.* (Park teaches a decryption process that corresponds to the repeated credit information encryption, (see at least paragraph [0188]).)

20. **As per claim 8:** *wherein the card issuer collects the first information and the sales price information accumulated in the sales processing device; decrypts the first information with the first key to obtain the card information; and performs settlement processing on* the sales price information based on the card information thus obtained. (Park teaches an optical settlement operation wherein credit information is transmitted to the card company and wherein the card company performs a decryption process corresponding to the repeated encryption process (see at least paragraph [0196]). In addition, Park teaches a

sale particulars settlement process wherein the sale particulars are recorded and stored (see at least paragraph [0223]).)

21. **As per claim 12:** *wherein the card information issuing server comprises: first encryption means for encrypting the card information with a first key; second encryption means for encrypting with a second key the card information encrypted by the first encryption means to generate the card authentication information; and card issuing information issuing means for synthesizing the card information encrypted by the first encryption means and the card authentication information generated by the second encryption means and transmitting the synthesized information to the mobile communication terminal as the card issuing information.* (Park teaches repeated card information encryption and storing such information in a portable terminal, (see at paragraphs [0184 and [0188]]), but failed to teach synthesizing encrypted information, however Meiji teaches synthesizing first and second encrypted rows to form a synthesized encryption sentence (See at least the abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the repeated card information encryption taught by Park with the method of synthesizing encrypted information taught by Meiji, since this would maintain the secrecy of the data (see at least Meiji's abstract).)

22. **As per claim 13:** *wherein the card information issuing server further comprises third encryption means for encrypting with a third key the information obtained by synthesizing the card information encrypted by the first encryption means and the card authentication information generated by the second encryption means, and the card issuing information issuing means transmits the information encrypted by the third encryption means to the mobile communication terminal. .* (Park teaches repeated card information encryption, wherein encrypted card information is transmitted and stored in the portable terminal (see at paragraphs [0184 and [0188]]), but failed to teach synthesizing encrypted information.

However Meiji teaches synthesizing first and second encrypted rows to form a synthesized encryption sentence (See at least the abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the repeated card information encryption taught by Park with the method of synthesizing encrypted information taught by Meiji, since this would maintain the secrecy of the data (see at least Meiji's abstract).)

23. **As per claim 14:** *wherein the mobile communication terminal comprises: storage means for storing the card issuing information issued by the card issuing information issuing means; and communication means for communicating with the sales processing means when sales processing is performed using the card issuing information to transmit the card issuing information stored in the storage means to the sales processing device.* (Park teaches a portable terminal that stores card information and communicating means for sales operation (see at least paragraph [0201] and Fig. 32).)

24. **As per claim 15:** *wherein the sales processing device comprises: separating means for separating the card issuing information received from the mobile communication terminal into the encrypted card information and the card authentication information; fourth encryption means for encrypting with the second key the encrypted card information obtained by the separation by the separating means; comparison means for comparing the information encrypted by the fourth encryption means with the card authentication information to determine the validity of the card issuing information; storing and accumulating means for storing and accumulating, when a sales transaction using the card issuing information has been performed, sales price information related to the sales transaction together with the encrypted card information. .* (Park teaches a repeated credit information encryption (See at least paragraph [0188] and Figures 22 and 24.), validating credit information and storing sales records (see at least paragraph [0223]). Park failed to teach the separation process of first and

second information, Meiji however teaches a method of separating two encrypted first and second rows to form encryption sentences (see at least Meiji's abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the above limitations taught by Park with the method of separating encrypted information taught by Meiji, as an extra step of authentication to protect private information (see at least Meiji's abstract).)

25. **As per claim 16:**

the sales processing device further comprises first decryption means for decrypting with the third key the card issuing information received from the mobile communication terminal, and the separating means comprises: separating means for separating the encrypted card information and the card authentication information from the information decrypted by the first decryption means; fourth encryption means for encrypting with the second key the encrypted card information separated by the separating means; comparison means for comparing the information encrypted by the fourth encryption means with the card authentication information to determine the validity of the card issuing information; and storing and accumulating means for storing and accumulating, when a sales transaction using the card issuing information has been performed, sales price information related to the sales transaction together with the encrypted card information. (Park teaches a decryption process that corresponds to the repeated credit information encryption (See at least paragraph [0188] and Figures 22 and 24.), validating credit information and storing sales records (see at least paragraph [0223]). Park failed to teach the separation process of first and second information, Meiji however teaches a method of separating two encrypted first and second rows to form encryption sentences (see at least Meiji's abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the above limitations taught by Park with the method of separating encrypted information taught by Meiji, as an extra step of authentication to protect private information (see at least Meiji's abstract).)

26. **As per claim 17:** wherein the settlement server comprises: collecting means for collecting the encrypted card information accumulated in the storing and accumulating means of the sales processing device and the sales price information; second decryption means for decrypting with the first key the encrypted card information collected by the collecting means to obtain the card information; and settlement processing means for performing settlement processing on the sales price information based on the card information obtained by the decryption by the second decryption means. (Park teaches means for collecting card information, accumulating sales information, decrypting encrypted card information and price settlements (see at least paragraphs [0223] and [0224]

27. **As per claim 18:**

Parks teaches the following limitations:

- *a card information issuing server that issues card issuing information including card authentication information and card information; a mobile communication terminal that receives the card issuing information issued by the card information issuing server through wireless communication and stores the received card issuing information; (See at least paragraph [0201] and Fig. 32.)*

- *an automatic vending machine that performs predetermined sales processing based on the card issuing information received from the mobile communication terminal through communication with the mobile communication terminal; and* (See at least paragraph [0223] and Fig. 45.)

- *a settlement server that collects sales information related to a sales transaction performed using the card issuing information from the sales processing device and settles the sales information,* (See at least paragraph [0224].)

- *wherein the card information issuing server comprises: first encryption means for encrypting the card information with a first key; second encryption means for encrypting with a second key the card information encrypted by the first encryption means to generate the card authentication information; third encryption means for encrypting the information synthesized by the synthesizing means with a third key; and* (see at least paragraph [0188] and Figures 22 and 24.)

- *card issuing information issuing means for transmitting the information encrypted by the third encryption means to the mobile communication terminal as the card issuing information, ,* (see at least paragraph [0196]).

- *the mobile communication terminal comprises: storage means for storing the card issuing information issued by the card issuing information issuing means; and communication means for communicating with the sales processing means when sales processing is performed with the use of the card issuing information to transmit the card issuing information stored in the storage means to the sales processing device,* (see at least paragraph [0196]).

- *the automatic vending machine comprises: first decryption means for decrypting with the third key the card issuing information received from the mobile communication terminal; fourth encryption means for encrypting with the second key the encrypted card information separated by the separating means;* (Park teaches a decryption process that corresponds to the repeated credit information encryption, (see at least paragraph [0188]).)

- *comparison means for comparing the information encrypted by the fourth encryption means with the card authentication information to determine the validity of the card issuing information; and* records (see at least paragraph [0223].)

- *storing and accumulating means for storing and accumulating, when a sales transaction using the card issuing information has been performed, sales price information related to the sales transaction together with the encrypted card information, and* (See at least paragraph [0222] and Fig. 43.).

- *the settlement server comprises: collecting means for collecting the encrypted card information accumulated in the storing and accumulating means of the sales processing device and the sales price information;* ,(See at least paragraph [0224].)

- second decryption means for decrypting with the first key the encrypted card information collected by the collecting means to obtain the card information; and . (Park teaches a decryption process that corresponds to the repeated credit information encryption, (see at least paragraph [0188]).)

- *settlement processing means for performing settlement processing on the sales price information based on the card information obtained by the decryption by the second decryption means.* . (Park teaches a decryption process that corresponds to the repeated credit information encryption, (See at least paragraph [0224].)

Park failed to teach the following limitations:

- *synthesizing means for synthesizing the card information encrypted by the first encryption means and the card authentication information generated by the second encryption means;*
- *separating means for separating the encrypted card information and the card authentication information from the information obtained by the decryption by the first decryption means;*

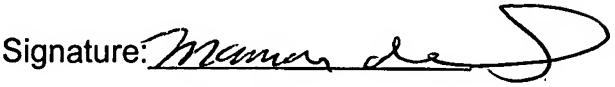
However Meiji teaches synthesizing first and second encrypted rows to form a synthesized encryption sentence and separating two encrypted first and second rows to form encryption sentences (see at least Meiji's abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine the repeated card information encryption taught by Park with the method of synthesizing encrypted information taught by Meiji, since this would maintain the secrecy of the data (see at least Meiji's abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mamon Obeid whose telephone number is (571) 270-1813. The examiner can normally be reached on Mon- Fri 7:30am-5:00PM est. alt Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Reagan can be reached on (571) 270- 1245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mamon Obeid
Examiner
Art Unit 3609
Date: May 11, 2007

Signature: 

JAMES REAGAN
SUPERVISORY PATENT EXAMINER